



BLUE SEA LIGHTING

User Manual

Please read the instruction carefully before use



BLMO1950Z

Outdoor Concert Events IP Waterproof 19pcs 50w Zoom
Wash Pixel LED Moving Head Light

TABLE OF CONTENTS

1. Technical Specifications	1
2. Menu	3
3. DMX Channel Instruction	7
4. Production Size	15

STATEMENT

The product has well capability and intact packing when leave factory. All of the user should comply with warning item and manual, any misuse cause of the damages are not included in our guarantee, and also can not be responsible for any malfunction & problem owing to ignore the manual.

1. Technical Specifications

Input Voltage: 100-240V, 50/60Hz

Power Consumption: Maximum 950W

Optical Beam Angle: 6° to 55°

Light Source: 19 x 50W RGB-WW 4-in-1 LEDs

Auxiliary Light: 210 RGB-3-in-1 LEDs

LED Lifespan: < 40,000 Hours

Pan Movement: 540° (16-bit)

Tilt Movement: 270° (16-bit)

Positioning: Automatic Horizontal and Vertical Repositioning

Color Mixing: Advanced RGB-WW 4-Color Mixing Technology

Color Temperature: 2400K-10000K

Color Output: Uniform, Shadow-Free, Saturated and Soft Colors

Color Capability: Supports 4.29 Billion Colors

Virtual Color Wheel: Included

White Presets: Common White Color Temperature Presets Included

Effects: 2D and 3D Graphic Effects

Effects Combination: Beam, Wash and Matrix Applications

Gobo Effects: Built-in Gobo Effects with Speed and Fade Control

Pixel Control: Individual Pixel Control

Liquid Effect: LiquidEffect™

Dimming: 0-100% Electronic Dimming

Strobe: 1-20 Flashes per Second

Display: Graphic LCD Display with Flip Function

Menu Buttons: 4 Function Buttons

Protection: Over-Temperature Protection

Signal Connector: IP65 XLR 3-Pin Connector

Network Connector: IP65 Ethernet RJ45 Connector

Power Connector: IP65 powerCON TRUE1 Connector

Control Protocol: DMX512

RDM: DMX-RDM Compatible

Standalone Mode: Supported

Local Control Panel: Supported

Network Control: ArtNet™ and sACN

DMX Modes: 26 / 50 / 50 / 127 Channels

Cooling System: Advanced Liquid Cooling System

Ventilation: Selectable Ventilation Mode

User Mode: Supported

Housing Material: Magnesium-Aluminum Alloy Sheet Metal

Base Material: Die-Cast Composite Alloy

Heat Sink: Aluminum Heat Sink

Housing: Molded Housing

Handles: Two Side Handles

Feet: Four Heavy-Duty Legs

Ingress Protection: IP66

Mounting: Two Omega 1/4-Turn Brackets

Mounting Points: Four 1/4-Turn Mounting Points

Safety Attachment: Safety Lanyard Attachment Point

Maximum Operating Temperature: 45°C (113°F)

Minimum Operating Temperature: -18°C (-4°F)

Minimum Operating Distance: 2 m (6.56 ft)

Certifications: CE, RoHS

Dimensions:349 x216.5 x480mm

Weight(With foldind clamps): 17.6 kg

2. Menu

Press the MENU button to enter the menu. Confirm the selected function with the ENTER button. Use the UP/DOWN buttons to select a mode. Once a mode is selected, press the ENTER button to confirm. To return to the main menu, press the MENU button. If no button is pressed for 15 seconds, the menu function will automatically exit.

System Setting		Description	
DMX Address	1-512	DMX address setting	
	LED DMX Address	LED DMX address	
DMX Channel Mode	26CH	DMX channel mode selection	
	50CH1		
	50CH2		
	127CH		
Operation Mode	DMX	DMX512	
	Artnet	Artnet	
	Artnet+DMX	Artnet+DMX512	
	Effect 1	Auto mode1	
Network Setting	Effect 2	Auto mode2	
	DHCH	Off/On	DHCP
	IP Setting	IP address	xxx.xxx.xxx.xxx
		xxx	IP address setting

			255.000.00 0.000	
		Sub-Net Mask	255.255.00 0.000	Sub-Net mask
			255.255.25 5.000	
		Network	0-127	
	Artnet Setting	Sub-Net	0-15	
		Data packet	0-15	
	sACN Setting	Data Packet	1-32000	
		Priority	0-200	
	Protocol selection	Auto Artnet sACN		
Pan Reverse	No/Yes			Pan Reverse movement
Tilt Reverse	No/Yes			Tilt Reverse movement
Encoder Calibration	No/Yes			Calibrate and adjust the effects to standard/right position
Fan Mode	Auto Low speed High speed			Fan mode selection
Signal Hold	Clear/Hold			Signal hold selection
Dimmer	Slow/Fast			Dimmer speed selection
Dimmer Curve	Linear Square Law Inverse Square Law S-Curve			Dimmer Curve
Dimmer	1.2kHz			Dimmer

Frequency	2.4kHz 16kHz 20kHz	frequency
Flip Display	Off/On	Screen flip
Backlight Control	Off/On	Backlight control
Auto Key Lock	Off/On	Auto key lock
Language Selection	Chinese/English	Language selection
Temperature	°C/°F	Temp Unit (°C/°F)
Reset Default	Off/On	Restore factory set
Manual Control		
	26CH	
Control	50CH1 50CH2 127CH	Channel-Based display
White Balance Setting		
Red	0-255	
Green	0-255	
Blue	0-255	
White	0-255	
System Test		
Effect 1		
Effect 2		Test effect
System Reset		
All	No/Yes	Reset All
Pan&Tilt	No/Yes	Reset Pan&Tilt
Zoom	No/Yes	Reset Zoom
System Information		
Software Ver	Display:	Vxx.xx
	Motor:	Vxx.xx
	LED board:	Vxx.xx
RDM Info	0XXXXXXXXXX xx	RDM UID
Humidity	x%	Humidity

Temp. Info	LED	xx°C/xx °F	LED board temperature
	Base	xx°C/xx °F	Base temperature
Channel Test			DMX channel value testing
Error Info			Error Info display

3. DMX Channel Instruction

Channel Mode				Function Description	DMX Value
26C H	50C H-1	50C H-2	127 CH		
1	1	1	1	Pan 8bit	0-255
2	2	2	2	Pan Fine 16bit: Fine control pan-movement	0-255
3	3	3	3	Tilt 8bit	0-255
4	4	4	4	Tilt Fine 16bit: Fine control tilt-movement	0-255
5	5	5	5	Pan&Tilt Speed: Maximum to minimum	0-255
6	6	6	6	Reserved	0-255
7	7	7	7	Reserved	0-255
8	8	8	8	Red - Main light / Control backlight when effect is on red (0-black, 255-100% red)	0-255
9	9	9	9	Red Fine- Main light / Control backlight when effect is on red fine-tuning(0-black, 255-100% red)	0-255
10	10	10	10	Green - Main light / Control backlight when effect is on green (0-black, 255-100% green)	0-255
11	11	11	11	Green Fine - Main light / Control backlight when effect is on green fine-tuning(0-black, 255-100% green)	0-255
12	12	12	12	Blue - Main light / Control backlight when effect is on blue(0-black, 255-100% blue)	0-255
13	13	13	13	Blue Fine - Main light / Control backlight when effect is on blue fine-tuning(0-black, 255-100% blue)	0-255
14	14	14	14	White - Main light / Control backlight when effect is on white (0-black, 255-100% white)	0-255
15	15	15	15	White Fine - Main light / Control	0-255

				backlight when effect is on white fine-tuning(0-black, 255-100% white)		
16	16	16	16	Strobe	OFF	0-31
					ON	32-63
					Slow to fast	64-95
					ON	96-127
					Strobe Pulse (slow to fast)	128-159
					ON	160-191
					Random Strobe (slow to fast)	192-223
					ON	224-255
17	17	17	17	Dimmer: intensity 0 to 100%		0-255
18	18	18	18	Dimmer Fine		0-255
19	19	19	19	Color Temperature	No function	0-21
					10000K	22-31
					9600K	32-41
					9200K	42-51
					8800K	52-61
					8400K	62-71
					8000K	72-81
					7600K	82-91
					7200K	92-101
					6800K	102-111
					6400K	112-121
					6000K	122-131
					5600K	132-141
					5200K	142-151
					4800K	152-161
					4600K	162-17

						1
					4200K	172-181
					3800K	182-191
					3600K	192-201
					3400K	202-211
					3200K	212-221
					3000K	222-231
					2800K	232-241
					2600K	242-251
					2500K	252-255
20	20	20	20	Color Preset: base on the color preset table		0-206
21	21	21	21	Color Presets & Main Light Color RGBW Crossfade	Output main light color RGBW	0
					Crossfade output	1-254
					Output preset color	255
22	22	22	22	Crossfade Between Color Presets	No Fade	0-4
					Crossfade between two preset colors 100ms to 5s	4-255
23	23	23	23	Zoom : narrow to wide		0-255
24	24	24	24	Zoom Fine		0-255
25	25	25	25	Reserved		0-255
26	26	26	26	Macro Function	No function	0-4
					Display-Off	5-9
					Display-On	10-14
					Display invert-Off	15-19
					Display invert-On	20-24
					Fan control - Auto	25-26
					Fan control-High	27-28

					speed	
					Fan Control-Low speed	29-30
					Reserved	31-32
					Reserved	33-34
					Reserved	35-36
					Reserved	37-44
					Dimmer curve -Square	45-49
					Dimmer curve - Linear	50-54
					1.2K	55-57
					2.4K	58-60
					16K	61-63
					25K	64-69
					Dimmer Curve - Inverse Square Law	70-71
					Dimmer curve-S curve	72-73
					Dimming mode - slow	74-75
					Dimming Mode - Fast	76-77
					Reserved	78-79
					Reset All	80-84
					Reset Pan&Tilt	85-87
					Reset Zoom	88-90
					Reserved	91-255
27	27	27	27	Main Light Pattern Effect	Effect OFF	0-9
					Effect 1	10-15
					Effect 2	16-23
					Effect 3	24-31
					Effect 4	32-39
					Effect 5	40-47
					Effect 6	48-55
					Effect 7	56-63
					Effect 8	64-71
					Effect 9	72-79
					Effect 10	80-87

					Effect 11	88-95
					Effect 12	96-103
					Effect 13	104-111
					Effect 14	112-119
					Effect 15	120-127
					Effect 16	128-135
					Effect 17	136-143
					Effect 18	144-151
					Effect 19	152-159
					Effect 20	160-167
					Effect 21	168-175
					Effect 22	176-183
					Effect 23	184-191
					Effect 24	192-199
					Effect 25	200-207
					Effect 26	208-215
					Effect 27	216-223
					Effect 28	224-231
					Effect 29	232-239
					Effect 30	240-247
					Effect 31	248-255

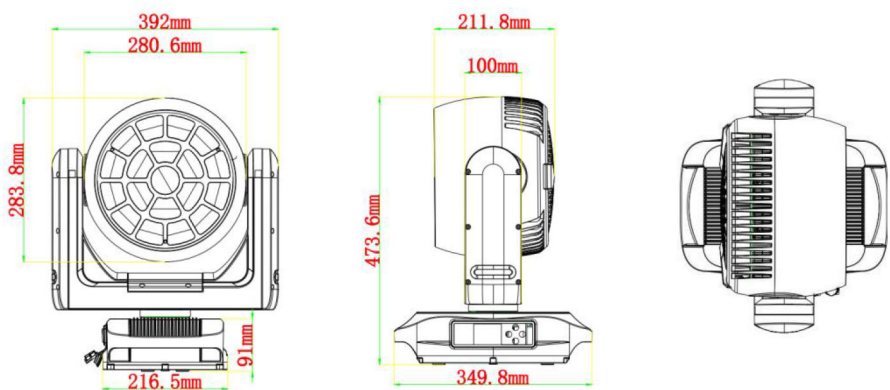
						5
	28	28	28	Main Light Pattern Effect Speed	Reverse fast to slow	0-125
					Stop (speed=0)	126-130
					Forward slow to fast	131-255
	29	29	29	Main Light Pattern Fade: Fade Chase		0-255
	30	30	30	Main Light Pattern Size: Chase category		0-255
	31	31	31	Pattern Effect - Red: red (0-black , 255-100% red)		0-255
	32	32	32	Pattern Effect - Green: green (0-black , 255-100% green)		0-255
	33	33	33	Pattern Effect - Blue: blue (0-black , 255-100% blue)		0-255
	34	34	34	Pattern Effect - White: white (0-black , 255-100% white)		0-255
	35	35	35	Pattern Effect Dimmer: Intensity (0-black, 255-100%)		0-255
	36	36	36	Pattern Effect Backlight Dimmer: Inactive when effect is Off Intensity(0-100%, 255-0%)		0-255
	37	37	37	Pattern Effect Strobe	OFF	0-31
					ON	32-63
					Strobe slow to fast	64-95
					ON	96-127
					Strobe Pulse (slow to fast)	128-159
					ON	160-191
					Random Strobe (slow to fast)	192-223
					ON	224-255
	38		38	Auxiliary Light Effect Control	Auxiliary light channel control effect	0-9
					Follow main light	10-19
					ARTNET or SACN	20-29

					control	
					Reserved	30-255
	39		39	Auxiliary Light Effect Dimming: Intensity 0 to 100%		0-255
	40		40	Auxiliary Light Effect Dimming Fine-Tuning		0-255
	41		41	Auxiliary Light Effect -Red: red (0-black, 255-100% red)		0-255
	42		42	Auxiliary Light Effect -Green: green (0-black, 255-100% green)		0-255
	43		43	Auxiliary Light Effect -Blue: blue (0-black, 255-100% blue)		0-255
	44		44	Auxiliary Light Effect	Effect Off	0-9
					Effect1	10
					Effect 2	11-12
					...	...
					Effect 122	253-254
					Effect 123	255
	45		45	Reserved		Reserved
	46		46	Auxiliary Light Effect Speed	Reverse fast to slow	0-125
					Stop (speed=0)	126-130
					Forward slow to fast	131-255
	47		47	Auxiliary Light Effect Backlight Dimmer: Intensity 0 to 100%		0-255
	48		48	Auxiliary Light Effect Backlight -Red: red (0-black, 255-100% red)		0-255
	49		49	Auxiliary Light Effect Backlight -Green: green (0-black, 255-100% green)		0-255
	50		50	Auxiliary Light Effect Backlight -Blue: blue (0-black, 255-100% blue)		0-255
		38	51	Point-controlled Crossfade: main light RGBW and point-controlled crossfade output		0-255

				Point Control	
		39		Ring 1 Red: Red (0-black , 255-100% red)	0-255
		40		Ring 1 Green: Green (0-black , 255-100% green)	0-255
		41		Ring 1 Blue: Blue (0-black , 255-100% blue)	0-255
		42		Ring 1 White: White (0-black , 255-100% white)	0-255
		43		Ring 2 Red: Red (0-black , 255-100% red)	0-255
		44		Ring 2 Green: Green (0-black , 255-100% green)	0-255
		45		Ring 2 Blue: Blue (0-black , 255-100% blue)	0-255
		46		Ring 2 White: White (0-black , 255-100% white)	0-255
		47		Ring 3 Red: Red (0-black , 255-100% red)	0-255
		48		Ring 3 Green: Green (0-black , 255-100% green)	0-255
		49		Ring 3 Blue: Blue (0-black , 255-100% blue)	0-255
		50		Ring 2 White: White (0-black , 255-100% white)	0-255
			52	Red 1: Red (0-black , 255-100% red)	0-255
			53	Green 1: Green (0-black , 255-100% green)	0-255
			54	Blue 1: Blue (0-black , 255-100% blue)	0-255
			55	White 1: White (0-black , 255-100% white)	0-255
			56	Red 2: Red (0-black , 255-100% red)	0-255
			57	Green 2: Green (0-black , 255-100% green)	0-255
			58	Blue 2: Blue (0-black , 255-100% blue)	0-255
			59	White 2: White (0-black , 255-100% white)	0-255
			...	...	...
			124	Red 19: Red (0-black , 255-100% red))	0-255

			125	Green 19: Green (0-black , 255-100% green)	0-255
			126	Blue 19: Blue (0-black , 255-100% blue)	0-255
			127	White 19: White (0-black , 255-100% white)	0-255

4. Production Size



5. Photometric Diagram

